## <u>REMARKS</u>

The Specification for the above-identified application has been amended to correct grammatical and typographical errors therein. A marked-up version of the Specification is submitted as "Attachment A - Marked-Up Version of Specification." Entry of this Preliminary Amendment is respectfully requested.

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Respectfully submitted,

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B588-027

## ATTACHMENT A - MARKED-UP VERSION OF SPECIFICATION

This is an attachment showing the marked-up version of the Specification.

## In the Specification

Rewrite the paragraph starting at page 21, line 3 and ending at page 21, line 16 as follows:

Fig. 10 is a flow chart showing details of the probe evaluation process (step S104) and the probe set selecting process (step S105) of this embodiment. In step S201, as described above, probe candidates are narrowed down to fewer probe candidates on the discrimination tree by the number of bases (node depth) or by the melting temperature based on a base sequence. In step S202, the entropy is calculated by equation (1) for each node, on a path on the tree, of each probe candidate obtained by the narrowing, and stored in that node. In step S203, evaluation values are calculated by using the evaluation function indicated by equation (2) or (3) for the nodes of these probe candidates, and stored in these nodes. —.

Rewrite the paragraph starting at page 30, line 13 and ending at page 31, line 2 as follows:

In the above example, a specific base position is evaluated by two values, i.e., whether or not specificity exists. However, a specific base position can also be evaluated by continuous values by using a scale such as entropy as explained in the first embodiment. For example, portions having \* marks in Fig. 12 are called specific base

sequences. In some of these locations, most types are G and only one type is A (the entropy decrease is small); in some other locations, half types are G and the other half types are A (the entropy decrease is large). As described previously, discrimination is advantageously performed if a location having a large entropy decrease is present in the center. Therefore, weighting is so performed for equation (4), e.g., an entropy decrease at the position of a specific base sequence is integrated to equation (4). This allows more accurate evaluation of [prove] proven candidate quality. --.